

US Army Corps  
of Engineers®

# Engineer Update

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## Civil works budgeted \$4.21 billion in FY05

The President's fiscal year 2005 (FY05) budget transmitted to Congress includes \$4.21 billion in new federal funding for the civil works program of the U.S. Army Corps of Engineers. Assistant Secretary of the Army (Civil Works) John Paul Woodley Jr., said, "The Army Civil Works budget for FY 2005 continues our focus on continuing and completing the work that makes the greatest contributions to the economic and environmental well-being of the nation."

The Army civil works program develops and restores the nation's water and related resources, operates and maintains existing federally-owned water resources projects, protects the nation's waters and wetlands, and restores sites contaminated by the nation's early atomic weapons development program.

The new federal funding for the civil works budget consists of \$3.3 billion from the General Fund, \$610 million from the Harbor Maintenance Trust Fund, \$115 million from the Inland Waterways Trust Fund, \$37 million from Special Recreation Use Fees and, under proposed legislation, \$150 million from the direct financing of hydropower operation and maintenance costs by three federal power marketing administrations.

The new federal funding will be distributed as follows among the appropriation accounts:

- \$1.92 billion for Operation and Maintenance.
- \$1.42 billion for Construction.
- \$270 million for Flood Control, Mississippi River and Tributaries.
- \$167 million for General Expenses.
- \$150 million for the Regulatory Program.
- \$140 million for the Formerly Utilized Sites Remedial Action Program.
- \$90.5 million for General Investigations.
- \$50 million for Flood Control and Coastal Emergencies.

Other sources of funding are estimated at \$437 million, including \$71 million transferred from the Bonneville Power Administration for operation and maintenance of hydropower facilities in the Pacific Northwest, and \$287 million contributed by non-federal interests. The budget also proposes to cancel all unobligated balances remaining at the end of FY04 for work on 41 projects that raise policy concerns.

The balance of funding required beyond FY05 to complete the budgeted construction projects is high. In recent years, these projects have competed for funding with numerous new construction starts. To maximize the net benefits of the construction program and finish the construction backlog more quickly than under current trends, the budget redirects funding from projects that are inconsistent with long-established policies, provides funding to complete 11 ongoing projects in FY05, and provides substantial funding for dam safety investments and eight projects that are the highest priorities in the nation.

The high priority projects are the:

- New York and New Jersey Harbor deepening project (\$103 million).
- Olmsted Locks and Dam, Ill. & Ky., project (\$75 million).
- Restoration of the Florida Everglades (\$125 million).
- Restoration of the side channels of the Upper Mississippi River system (\$28 million).
- Projects to provide flood damage reduction to urban



Artwork by Jan Fitzgerald

areas — the Sims Bayou, Houston, project (\$16 million), and the West Bank and Vicinity, New Orleans, project (\$37 million).

• Projects to meet environmental requirements in the Columbia River Basin (\$107 million), and the Missouri River basin (\$69 million).

The budget also funds three new projects with high economic and environmental returns, and enables continued progress on other construction projects in the Construction account and the Flood Control, Mississippi River and Tributaries account.

In keeping with its approach to reducing the backlog, the budget limits funding for the planning and design of new projects. However, the budget includes five new, high priority studies that compete successfully for funding.

The budget for Operation and Maintenance supports key infrastructure, provides for improved facility security, and emphasizes recreation modernization. The budget also proposes a new \$35 million reserve fund to meet unexpected, urgent maintenance and repair needs at key facilities. The budget de-emphasizes shallow draft harbors and low commercial use waterways, but supports maintenance funding for shallow draft harbors that provide significant commercial navigation, commercial or subsistence fishing, or public transportation benefits.

Two programs have been rated as moderately effective using the administration's Program Assessment Rating Tool. For the Regulatory Program, the budget enables continued efforts to reduce permit evaluation time, improve protection of aquatic resources, and provide wetlands protection through watershed approaches. For the Flood Control and Coastal Emergencies program, the budget proposes \$50 million to prepare for and respond to major flood and storm emergencies.

The Civil Works program has made progress on the President's Management Agenda, and we are confident that our work on the President's initiatives will yield greater program efficiency and effectiveness in the future.

The FY05 Army civil works budget information, including a state-by-state breakdown, is available on the Corps' World Wide Website: [www.usace.army.mil/civilworks/cecwb/budget](http://www.usace.army.mil/civilworks/cecwb/budget).



Transatlantic Programs Center recently completed building the new headquarters for U.S. operations in the Arabian Gulf region. The facility is located at the Naval Support Activity in Manama, Bahrain. (Photo courtesy of TAC Bahrain Resident Office)

## Corps builds Navy HQ in Bahrain

By Joan Kibler  
Transatlantic Programs Center

Supporting the U.S. Navy is not one of our more widely known missions. But the U.S. Army Corps of Engineers is busy building facilities for the Navy in Bahrain, a small island nation in the Arabian Gulf.

On Jan. 4 the Navy and the Corps opened a new headquarters there to support Navy operations in the Gulf. The ceremony was held at the Naval Support Activity in Manama, the permanent shore base for Navy operations in the Gulf region. Cutting the ribbon were Lt. Gen. Robert Flowers, Chief of Engineers, and Vice Admiral David Nichols Jr., Commander, U.S. Naval Forces Central Command (NAVCENT) and Fifth Fleet.

The new headquarters was designed and built by Transatlantic Programs Center (TAC) under the Navy military construction program. TAC engineers designed the facility, working with the Navy's program managers in the U.S. and Bahrain to ensure the structure met all operational requirements. TAC's Bahrain resident office supervised the construction.

The Corps has been the Navy's design and construction agent for an aggressive program at the Naval Support Activity, with facilities totaling \$67 million built to date. The program focuses on force protection to provide a safe living and working environment for Navy personnel and their families assigned in Bahrain. Typical projects include barracks, a medical/dental clinic, recreation facility, childcare center, and now a new headquarters complex.

The work is accomplished by a joint Navy/Corps project delivery team with members who, for the most part, have worked together for four years on this program. Team members come from multiple organizations in the U.S., as well as offices in Bahrain. Depending on the requirements, experts from other Navy organizations are often brought into the team.

The headquarters is a prime example of a project requiring significant coordination and interface.

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## Insights

# Hold the higher ground in both military and life

By Col. Mark Fentress  
Chaplain, U.S. Army Corps of Engineers

For many years I have been blessed by the humble prayer of the Psalmist — "Lead me to the rock that is higher than I." This prayer of the Hebrew poet was borne out of an experience of great need. The Psalmist found himself in a danger zone and looked up to the Lord for strength, direction, and security.

Who among us has not found himself or herself in one of these danger zones? Some may be facing the physical danger of being on the line in the Iraqi or Afghanistan desert. Others may be experiencing financial or relationship problems. Some may be experiencing the stress of physical illness or grief. Others may be facing the danger of giving into "peer pressure." And the list goes on and on.

We, like the Psalmist, desire to escape these danger zones, or at least to find strength for overcoming these moments of vulnerability. In his day, there was security in height because the high mountain strongholds were the easiest to defend. Modern warfare continues to prove the advantage of holding the high ground. So in living as in fighting war, one advantage of altitude is security and perspective.

Consider the security given by a high and resolute faith, thoughts, standards, and godly character. Such a faith gives us courage when our moral strength begins to run low. Such character protects us from the lure of the vulgar and the clamor of the cheap. It also lifts us above the petty slights of others.

During the early days of the Civil War, Gen. Robert



E. Lee was severely criticized by Maj. Gen. W.H.C. Whiting. It might be expected that Lee would wait eagerly for a time when he could get even.

That day came when Jefferson Davis, the President of the Confederacy, asked Lee what he thought of Whiting. Without hesitation, Lee commended Whiting in high terms.

An officer present drew Lee aside to suggest that he must not know what unkind things Whiting has said about him. Lee, a devout Christian believer, responded, "I understood that the President desired to know my opinion of Whiting, not Whiting's opinion of me."

Oh, the power of a robust faith, godly character, ethics, and standards!

Above all, remember that the source of strength for facing these danger zones of life is the Lord God. He is the "Rock of Ages," moral compass, and eternal friend of every man. During this holy season of Easter,

look prayerfully to Him who is the rock that is higher than yourself. Embrace and grow in this vibrant faith, and you will discover a new zest and strength for living!

**Prayer** — Lord God, be ever near to us and our families during this holy season. Especially, be a protector and a shield of strength to our fellow Americans serving in harm's way overseas, and bless their families. **Amen.**

In faith and friendship,  
**Chaplain Mark**

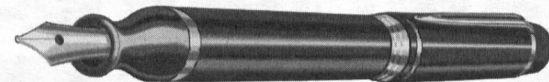
*(The opinions in this article are those of the writer and do not reflect the official policy or position of the U.S. Army Corps of Engineers, the Department of the Army, the Department of Defense, or the U.S. government.)*

the offices. In addition, avoiding the disruptive ramping/de-ramping phenomena is the key to managing our most critical asset — our capable workforce.

**Started in 1987.** NAD realizes that we operate in a dynamic and uncertain workload environment subjected to many internal and external pressures in the federal government. Starting back in 1987, when New York District undertook the massive Passaic River Flood Damage Reduction Study, NAD and its districts have used the capabilities of their sister divisions and districts through e-mail, conference calls, and video teleconferences.

As technology improved, NAD capitalized on past experience and improved virtual capabilities when it under-

## Letters to the Editor



### Finally!

Just a short note to thank you and Lt. Gen. Flowers for finally putting in perspective and "plain English" all the mysterious terms and acronyms we at the district level have been hearing about in the past few years.

The article "USACE 2012 explained in plain English" in the January *Engineer Update* helped to pull together many of the terms and process I have had questions about.

This article should end up on the bestseller list for all Corps employees!

**Jim Goudzwaard**  
Portland District

### Dear Corps Family

Trudy and I have been retired for almost a year now. We love living close to the Army and Fort Leonard Wood, Mo., the home of our Engineer Regiment.

Our family has prospered. We have so many wonderful memories of our more than 32 years in the Army. We have been so proud this past year of all that the Soldiers and civilians of the U.S. Army Corps of Engineers have done. The world and the United States of America is a better, safer place because of your efforts. What a great team.

In closing, we want to thank each and every one of you for sharing the Corps of Engineers with us and for allowing us to be a small part of this wonderful group of dedicated Soldiers and civilians.

We want to extend a special thanks to everyone in the Headquarters for our retirement ceremony. Lt. Gen. Robert Flowers, the Chief of Engineers, Col. Joe Schroedel, Rev. Detrick Gales, Delores Green, and Sgt. 1<sup>st</sup> Class Shrona Hunt deserve a special thanks.

*Hooah!*  
*Essayons!*

**Command Sgt. Maj. (ret.)**  
**Bob and Trudy Dils**

*The "Engineer Update" welcomes letters to the editor. All letters must be signed, and include contact information. We reserve the right to edit letters for length and grammar.*

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## Commentary

# Virtual engineering leads the way to the future

As the U.S. Army Corps of Engineers moves into the 21st century through USACE 2012, virtual engineering will become an integral part of our organization, our culture, and the way we do business. This capability will significantly enhance the Corps' responsiveness, foster vertical and horizontal teaming, and strengthen our partnering skills with our customers and stakeholders.

Technologies now exist to link remotely located technical expertise and integrate them with the local project delivery teams (PDT). The implications are enormous, and the teaming possibilities are almost unlimited.

Virtual engineering/teaming is a pillar of USACE 2012, and one familiar here in North Atlantic Division. NAD has long worked in cyberspace as we recognized the complex challenges caused by constantly shifting workloads, and the need for and benefits of sharing resources among





# Civilian survives firefight in Iraq

By Bernard Tate  
Headquarters

Gary York doesn't consider himself a hero. He didn't plan to earn the Defense of Freedom Medal. And he certainly didn't plan to get shot in the head during a firefight in Iraq.

All he wanted to do was help the Iraqis rebuild their electrical power system.

York is a senior controller at Gavins Point Dam in Omaha District, but last Sept. 21 he left his home in Yankton, S.D., and volunteered for Task Force Restore Iraqi Electricity. (On Jan. 25 TF-RIE became the Electric Directorate under the new Gulf Region Division.)

York's role in the mission went smoothly until Christmas Eve, his last official day, when ambushers struck his group between Balad and Sammara on the main highway to Baghdad. They were coming from a meeting at a switchyard in west Baghdad, traveling in a convoy of three SUVs protected by Iraqi contract guards. A red car approached from behind the convoy, attacking the rear vehicle first and killing an Iraqi guard.

The attackers then struck the second SUV that York drove. Ron Church from Great Lakes and Ohio River Division was also in that SUV.

"I took a round that actually went through the door post of my car and went into my head just in front of my ear," York said.

An Iraqi contract guard in York's vehicle was killed, and the SUV ran into the ditch. They began taking heavy fire from shooters behind a berm at an Iraqi farm, and from the red attack car, which had returned. York, Church (who was unhurt), and the survivors of the rear vehicle crawled about 100 yards down the ditch to the lead vehicle.

"The dirt all around us was alive with bullets hitting ahead, behind, and around us," said York. "The firefight lasted three or four minutes, which the guys with us



Gary York with his wife Jane during the ceremony where he received the Defense of Freedom Medal. (Photo by Melissa York)

said is a long time. Such things are usually very brief."

York said the rear vehicle was so riddled with bullets that it wouldn't run, and they couldn't go back to maneuver his SUV out of the ditch. So everyone piled into the lead vehicle.

"We took off with the doors open and people hanging out shooting. We had to leave our two dead behind," York said with regret. "The red car had retreated, which

gave us a chance to escape. We found out later that our guards had killed one guy in the red car, and Army military police arrested the others."

After a high-speed run, they came to an Iraqi police checkpoint, where they unloaded the Iraqi guards and their wounded, who were transported to an Iraqi hospital.

That left York, Church, and two American contractors running for safety. York had been in-country the longest and knew the area, so he navigated them to a U.S. Army outpost at Brassfield-Mora. From there they were medevaced by helicopter to the 28<sup>th</sup> Combat Support Hospital at Camp Speicher in Tikrit. There, Army surgeons operated on York to remove the bullet from his head. Then York was flown to another Combat Support Hospital in the Green Zone in Baghdad.

On Dec. 28, he was flown to the Landstuhl Army Medical Center in Germany, where his wife, Jane, joined him. After being flown back to the U.S., he spent time for convalescence and observation at Walter Reed Army Medical Center in Washington, D.C., and then was released to go home to Yankton.

On Feb. 20, Brig. Gen. William Grisoli, Northwestern Division Commander, presented York the Defense of Freedom Medal in a ceremony at the Gavins Point Powerhouse in Yankton.

"Heroes are not just those folks you read about in the paper," said Grisoli during the ceremony. "They're normal people, people who make a difference."

Jane said that she is "Very proud because I know this is something he really wanted to do. He was torn about having to come back here early, and would love the opportunity to return to Iraq."

York said, "Power was always routed to where Saddam was, and he could leave the rest of the country in the dark at will, which he did sometimes. There are challenges in Iraq that you can meet head-on without going through all the red tape. It's very rewarding."

## Virtual engineering

Continued from previous page

took the Waterbury Dam project in 2000. For this project, NAD teamed virtually with Headquarters and three design support districts to create a PDT that evaluated, designed, and implemented remedial measures for a critical dam and public safety project. Project reports and approvals were developed in near-record time.

**New York MTA.** This effort was quickly followed by the review of the New York City MTA \$4.3 billion East Side Access Project, a special task assigned to the Corps by the Federal Transportation Administration (FTA) in 2001. The FTA also imposed severe time-lines for a comprehensive and detailed review of their complex project. In response, the Corps used virtual teaming to assemble a Corps-wide team of experts from multiple design disciplines — cost, structural, geotechnical and track engineering, contracting and acquisition strategies, tunneling expertise, and deep underground construction. Technical expertise at Headquarters, two divisions, and six district offices met the FTA's expectations.

Finally, much of the environmental work now performed in NAD uses virtual design teams from multiple hazardous/toxic remedial work design centers, sister districts and divisions, the Corps' Center of Expertise, and a large number of environmental designers and contractors.

**Next level.** Now, virtual design teaming has been raised to the next level. NAD has leveraged the latest virtual technology by fielding the hardware and software to allow virtual design workload sharing and splitting anywhere in the Corps. This latest approach can achieve full reach-back capability to and from any remote location to integrate those distant designers into the local PDT through computer-aided drafting & design (CADD) file sharing and data management strategies.

ProjectWise, a commercial off-the-shelf (COTS) software already in use by many districts, was chosen for its ability to let designers work interactively over computer networks on CADD drawing files, allowing each designer to see daily design changes made by the various engineering disciplines working on a project.

This technique is not restricted to designers and engineers. It can be used by all elements in the Corps to tap into the synergy of cyberspace. Real time or active file and data sharing can be done by Contracting, Counsel, Real Estate, Operations, and others, as well as externally with our many stakeholders, customers, and end-users.

**Lessons learned.** To achieve this latest level of sophistication, NAD assembled a team of knowledgeable Corps individuals familiar with virtual teaming practices. Initially, the team researched and investigated current procedures and technologies used by architect/engineer firms operating globally. Three firms were solicited due to their recognized virtual expertise/teaming — CH2MHILL, Jacobs Facilities, and Bechtel Corporation.

The major lessons we learned from them were:

- Virtual Teaming requires a cultural change in the organization. Both employees and management need high commitment.
- People processes are as essential as the technology.
- Clear lines of authority and division of responsibilities must be established.
- Virtual teams must bond socially and develop relationships early in the project.
- Trust and respect of the virtual team members is critical to the success.

**Pilot study.** A virtual design teaming pilot study is underway and nearing completion in NAD. The PDT includes Europe District and Norfolk District, Corps

ProjectWise technical expertise from Huntington District, and project management and technical support from New York District.

This project is a prototype test for one of our major military customers using virtual design metrics developed by NAD. An important part of this effort has been to give the Huntington District team the responsibility to purchase, assemble, migrate the system to the Central Processing Center (CPC) in Vicksburg, provide training, and now manage the system. Lessons learned from this experience will be used to develop standard operating protocols that will facilitate exporting this design approach worldwide.

**The future.** This approach, once fully tested and embraced within the Corps, will permit the use of smaller design teams in-country during contingency and emergency operations. Operating out of the CPC (the communications hub at the Waterways Experiment Station in Vicksburg) and using COTS software, this system allows real-time intercontinental support between Corps elements in project design and work sharing.

With the proper communications hardware, like the tele-engineering gear now in use in Afghanistan and Iraq, in-country on-the-ground forces can call upon technical and non-technical expertise anywhere in the Corps.

The future of the Corps is now being chartered with USACE 2012, and virtual teaming is just one of many tools that will make it a success, if we choose to take advantage. NAD invites the rest of the Corps to join us in this bold new venture.

(Mohan Singh, John Bianco, and John Kerkowski, all of North Atlantic Division, collaborated on this article.)

(The opinions in this article are those of the writer and do not reflect the official policy or position of the U.S. Army Corps of Engineers, the Department of the Army, the Department of Defense, or the U.S. government.)



# Echoes of 1812

## Dredging finds old ordnance from Battle of Baltimore

Article and Photos  
By Mary Beth Thompson  
Baltimore District

The British navy fired about 1,500 bombs, rockets, and cannon shells at Fort McHenry during the War of 1812, the inspiration for the *Star Spangled Banner*. About 400 struck the fort.

Where did the rest go? Probably into Baltimore Harbor, where Baltimore District is now finding them.

Cannonballs that appear to be relics of the Battle of Baltimore were among more than 1,300 ordnance items culled from debris removed from Baltimore Harbor during 2003 dredging operations. In all, about 40 historic items were found.

The largest and most distinctive cannonball weighs 318 pounds and is 15 inches in diameter. All of the cannonballs are from the Civil War and earlier, said George Follett, the project's ordnance and explosives safety specialist.

"They go from one-inch grapeshot to a 15-inch cannonball," Follett said. The list of historic ordnance includes:

- Four-inch Hotchkiss solid shots.
  - Schenkl projectiles (explosive shells).
  - Grapeshots from four ounces to two pounds.
  - Cannonballs from one-inch to 15 inches in diameter and one pound to 318 pounds in weight.
- Six Schenkl projectiles that contained gunpowder were destroyed.

### Dredging finds

Dredging projects typically remove sediment that has filled in an existing channel. During dredging operations, pieces of timber, tires, concrete blocks, and other debris are brought up from the harbor floor. This refuse is loaded on debris barges, sorted, and disposed.

In 2002 and 2003, Baltimore District deepened and widened certain channels and anchorages for its Baltimore Harbor Anchorages and Channels project, which meant delving into territory previously undisturbed.

"That presented an unusual opportunity," said Claire O'Neill, project manager. "In 2002, we dredged areas in the harbor that had not been dredged before, and we discovered several ordnance items that turned out to be from the World War II era. We expected and were prepared for ordnance finds when



A cannonball, possibly from the War of 1812, rests in debris dredged from Baltimore Harbor.

we dredged again in 2003."

The project team developed a safety plan to address the potential hazard of finding ordnance in the 2003 debris. Eight barge-loads of debris were taken to Hart-Miller Island, and safety zones were established for their unloading and sorting. The safety plan worked as expected, protecting boaters, watermen, and the public from potential danger.

What was surprising about the 2003 dredging debris was the large number of historic ordnance items that were also recovered.

"Normally, the cannonballs that we get are random finds," said Howard Wellman, lead conservator of the Maryland Archeological Conservation Laboratory. "Unless you're excavating a full-fledged shipwreck, you don't find this kind of quantity. It's a real cross-section of sizes and types."

The 2003 dredging operations included areas off Fort McHenry, a national park that is a Baltimore landmark because of the War of 1812.

### The Battle of Baltimore

On Sept. 13, 1814, after their victory in Washington, D.C., the British fleet attacked Fort McHenry, intending to get past the fort's guns to capture the prosperous city of Baltimore.

The battle ended on Sept. 14 with Fort McHenry still intact after 25 hours of intense bombardment. The dawn saw a huge U.S. flag still waving over the fort as the British ships sailed away, their bid to capture Baltimore defeated.

From a U.S. truce ship in the harbor that morning, Francis

Scott Key was so moved to see the colors flying that he penned the poem, *The Star Spangled Banner*. The verse was later set to music and eventually became America's National Anthem.

"We know there were 1,500 bombs and rockets fired during the battle," said Susan Langley, Maryland State underwater archaeologist. "We know that 400 or so landed, and a certain number burst in the air, as the song says. Where are the rest? They're probably in the harbor."

Follett sought opinions from Les Jensen, curator of arms and armor at the West Point Museum, and Scott Sheads, a National Park Service historian at Fort McHenry, about a cannonball that was found early in the sorting process. The cannonball was a solid shot that measured 5 3/8 inches in diameter and weighed about 20 pounds.

"Given where the round was found, it is likely either to be a round fired by the British during the War of 1812 or one from Fort McHenry," Jensen said after the initial assessment.

Sheds said that the cannonball's dimensions and appearance fit that of an 18-pounder, which were used and fired during the battle by American shore batteries. "It most likely came from Lazaretto Battery, which mounted three such cannon, or from one of the American gunboats in the channel," Sheads said. "Of course, no one will ever know for sure."

### Conserving the finds

The cannonballs, along with additional items of historic interest, were turned over to Wellman in three increments — two in October and one in Janu-



George Follett (left), Baltimore District's ordnance and explosives specialist, and Claire O'Neill, project manager, talk with Dave Bibb of the Maryland Port Administration about historic ordnance found among material dredged from Baltimore Harbor.

ary. He is cleaning and preserving them at the state lab in St. Leonard, Md. Wellman started the conservation process by putting the items in a holding solution of sodium hydroxide.

"That stops normal oxidation, and it also starts washing out any soluble chloride salts from the seawater, because it's the chloride that tears the iron apart," Wellman said. "That's what causes the destructive kind of rust."

The next step is hands-on cleaning, using air scribes, chisel, and picks to remove the deposits. When the surfaces are clean, Wellman expects to put the cannonballs through electrolytic reduction to remove other chlorides that may be trapped in the metal matrix.

### Exhibiting

"Objects like these can take anywhere from six months to a year to clean, depending on the environment they came from," Wellman said. "It's all relative depending on the condition of the object and where it was found. They were deep in the sediments, so it may be relatively fast."

When Wellman is satisfied that the salts are out, the items will receive protective coatings. Then they will be turned over to Langley, who works at the State Historical Trust.

The old ordnance was found on Maryland state property, so under law they are State of Maryland property. The trust is responsible for their storage and display. Langley will consider requests for showing the cannonballs. She has heard from or expects to hear from the Maryland Port Administration, and the new visitor center at the Inner Harbor and Fort McHenry, among others.

"We'd like to see them back out where people can see them," Langley said. "We'd like them to be back in the environment they came from, or as close as possible."

This find of historic ordnance is unique, because it is unlikely Baltimore Harbor will ever again give up another treasure trove. The Baltimore Harbor Channels and Anchorages project is complete, and there are no other projects planned that include dredging previously undredged sites.



# Afghanistan orphanages get Corps help

By Christopher Augsburger  
Baltimore District

Several months ago, when Jim Sherman stopped at a traffic circle in downtown Kabul, a family came to the vehicle and began begging. At first, he thought little of the scene.

"This happens all the time," Sherman said. But when the youngest daughter came to his window, gesturing with her hands that she wanted some food, he saw a familiar face. "She was the same age as my daughter, six years old, and looked a lot like her. That image haunted me."

The sight of the little girl's face moved Sherman so much that he decided to do something.

"I guess the reason I was driven was that I knew I couldn't find this one girl in all of Kabul, but I needed to make a difference to other children's lives," he said. "I asked my co-workers for donations, and invited others to come help."

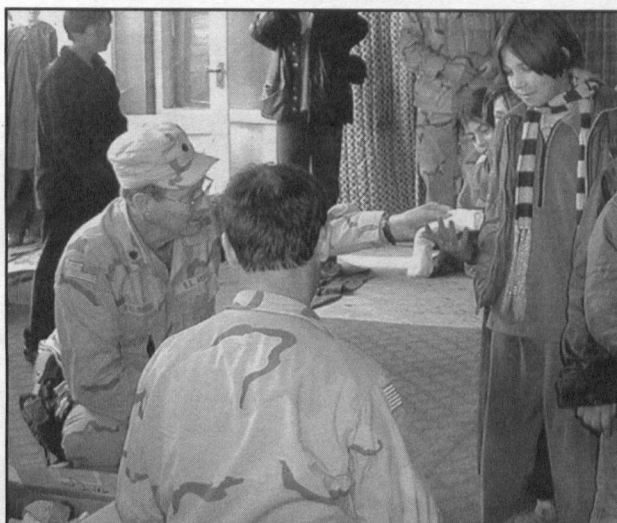
They responded.

Thousands of Afghan children live in two main orphanages in a ruined western sector of Kabul. Victims of war, products of poor families and children of single mothers, they struggle at the feet of a withered economy in a politically unstable nation. Many of their families survived 23 years of war, and so they do not fit the standard definition of an orphan. In fact, almost half of these children come from families who have at least one parent but can't support their children, according to research conducted by the *Christian Science Monitor*.

Mohammad Ghuas Bahiri, the Deputy Minister of Labor and Social affairs in the Afghan transitional government, acknowledged the extreme financial strain of the families of his nation.

"They are forced to separate from their families for economic reasons," said Bahiri. Since June 2002, the number of children enrolled in the two main orphanages, Allahuddin and Thahieya Maskan, has increased to more than 4,200. The orphanages, which struggled to provide food and clothing while under Taliban control, have reached their capacity and now have to turn away children.

In response to these conditions, witnessed first-hand by Sherman and other U.S. Army Corps of Engineers



Doug Leite (back to camera) of New York District, and Larry Melaas of Rock Island District distribute contents of "Care packages" in an orphanage in Afghanistan. (Photo courtesy of New York District)

employees serving in Afghanistan as part of a Field Force Engineering team, Sherman saw an opportunity to help. Sherman, a Portland District employee, spearheaded a relief effort to supply the orphanages with food, clothes, and toys, and formed a committee that collected contributions from everywhere.

The Afghan Area Office staff donated more than \$1,000. Corps employees contributed items collected from home, while other Corps districts collected a thousand pairs of children's gloves from a church. Detroit District alone sent 16 boxes of donations over a two-week period. Several Baltimore District employees were among the committee members who helped Sherman organize this effort, including Jodie Beauchamp from Planning and Billie Leigh from Resource Management.

"We did this on our own time and with our own resources," said Beauchamp.

On New Year's Day, Sherman's efforts had a resounding effect on those who participated in this effort.

"It was obvious from the sores, scabs, and scars some of the children carry on their bodies that they haven't

always had the best care, nor lived under optimal conditions," said Andrea Duff-Arnold from Detroit District. She, along with 11 other members and soldiers from the Corps, spent the first day of 2004 delivering food, clothes, and toys to the children of Allahuddin Orphanage.

"A couple of the people who attended started to tear up when they saw the wounds on the kids," she said.

Many children had bare feet, made all the more disturbing by the fact that the buildings had little heat, according to the delivery team. Corps employees did not make the trip alone. Always mindful of the constant threat to safety, the committee recruited three Soldiers to accompany the group during the trip to the orphanages.

"This was one of the few days off that they have, and they were more than eager to help us get to the orphanage," said Beauchamp.

Sherman's mission became both a low point and a high point for those who saw the orphanages for the first time with their own eyes.

"To see the need and the smiles of the children reminded me of my purpose here, which is simply to help the people of Afghanistan," said Brett Call from Rock Island District.

According to Leigh, children came from their rooms and hallways in droves and formed lines where the team had set up distribution tables.

"The youngest came first, and each successive line was a little taller than the previous line," said Leigh. "After a short period, I was somewhat overwhelmed with emotion and had to go outside to clear my mind."

Team member Duff-Arnold said that she chose not to view this as a sad moment.

"I was more focused on the joy we were bringing the children," she said. "Their eyes lit up when they saw the toys," she said. The members of the delivery team said they plan to keep Sherman's cause alive and make more trips to the orphanages. Leigh and Beauchamp said the team's goal is to develop a lasting program.

"I'll stay involved with the committee to get something in place that will last," said Leigh.

Sherman said that he would always think about that one little girl on the street and wonder. But thanks to his Corps team, maybe she no longer will be a starving child on the street.

## Partnership reaches Native students

Native Americans have always been greatly under-represented in the science and engineering fields of the U.S. Army Corps of Engineers. But that is changing, thanks to a growing partnership between the Corps and the American Indian Science & Engineering Society (AISES).

When Richard Zaragoza wandered down the aisles of the AISES National Conference career fair in Tulsa, Okla., in Nov. 2002, he was just hoping to land an interview with someone, and figured his odds of joining USACE were nearly impossible. But Zaragoza is now a civil engineering intern with Albuquerque District.

**Perspective.** "I thought that joining the Corps would give me a more informed perspective and a chance to make a difference," Zaragoza said.

And last Nov. 22-25, Zaragoza found himself in another Corps booth at the 25<sup>th</sup> National AISES Conference & Career Fair in Albuquerque, N.M. The Corps had two booths side-by-side at the student career fair, one for the Corps' display, and the other with Tulsa District's River Flood Plain model.

The booths were manned by Zaragoza and other Corps volunteers, including several members of the Federally Recognized Tribes. They were reaching out to other talented Native American and Alaskan Native college students who are pursuing studies in science, engineering, and technology, telling them about the possibilities that the Corps offers.

"A major ongoing project is the Bureau of Indian Affairs' Fort Wingate Elementary/Middle School Replace-

ment at Fort Wingate, N.M.," Zaragoza said. "It will replace a 100-year-old school and serve mainly Native American children from the Eastern Navajo Nation in the surrounding rural areas. My involvement with this project and others like it is not only personally rewarding, but also hopefully demonstrates to Native Americans that today's Corps works with, not against, Native interests."

**Recruiting effort.** Zaragoza is an example how a focused effort to attract and develop a productive and diverse workforce can pay big dividends. For AISES members, this is an unprecedented opportunity to reach Corps hiring managers at the Headquarters, district, and division levels.

And for the Corps, recruiting highly qualified Native American candidates is a key component of developing a workforce that can deliver quality engineering to a culturally and geographically diverse nation.

"The Corps invests a great deal of time and resources to recruit and develop Career Program 18, Engineers and Scientists," said Lt. Gen. Robert Flowers, the Chief of Engineers. "Part of this investment is in programs such as AISES, the Black Engineer of the Year, American Minorities in Engineering, and the Hispanic Engineer National Achievement Awards Corporation. The Corps' participation in AISES and similar programs is important to our future. It brings bright young talent into our agency, while continuing to diversify our workforce."

The Corps takes that responsibility seriously. In 2003,

for the first time, USACE was an Onyx Level sponsor of the conference and career fair, AISES's second-highest ranking for sponsorship. This demonstrated the Corps' commitment to attract qualified Native Americans to the science and engineering career fields. Dwight Burns of Northwestern Division is the USACE champion of AISES. Burns is supported by a Corps-wide team, with Kimberley Oldham of NWD as AISES project manager.

**Access.** Onyx level sponsorship gives the Corps access to the AISES resume database, which will allow districts and divisions to be more aggressive and focused in their recruiting plans. The Corps is also acknowledged on the AISES website, and recognized in all AISES printed material.

After the career fair last November, AISES held a reception for all sponsors. The Corps received a special pottery plaque designed by Edward Chiwee Jr., a Laguna-Acoma/Isleta Pueblo Indian from Isleta, N.M.

For more information, and resumes on the AISES resume database, contact Kim Oldham at (503) 808-3884, or Richard Gallegos at (415) 977-8017. Resumes collected at the career fair can be accessed at [www.hq.usace.army.mil/cehr/e/recruit/recruithome.htm](http://www.hq.usace.army.mil/cehr/e/recruit/recruithome.htm)

(Clare Perry, Strategic Communications Officer for the Regional Business Management Office in Northwestern Division, and Kimberley Oldham, the AISES project manager in NWD, both contributed to this article.)



# Corps lake hosts special moose hunt

## *Paralyzed veterans bag good memories at Chena Lake*

By John Schaake  
Alaska District

The Chena Flood Control Project in Alaska District hosted the U.S. Army Corps of Engineers' first special moose hunt for paralyzed veterans last September. The hunt was the first of its kind under a national partnership agreement between the Corps and the Paralyzed Veterans of America (PVA) signed in 1996. The goal of this relationship is to promote opportunities on, and accessibility to, Corps-managed public lands by paralyzed veterans and other mobility-impaired Americans.

The Chena hunt evolved from a PVA initiative to expand participation by their members in outdoor programs promoting hunting and shooting sports on public lands. They looked to the Corps for potential lake and dam projects across the country that could host these events. Corps Headquarters put out a nation-wide solicitation to find interested projects.

### Chena first

Recognizing a unique opportunity, the Chena Flood Control Project responded and was immediately selected as the first Corps project to host a PVA hunt.

Shortly after Chena's selection, Douglas Warren, PVA's Program Development Officer for Shooting Sports, made a site visit to the project. He found it a perfect place to hold the PVA's first-ever big game hunt on a Corps flood control dam project.

He found the hunting area selected by Chena park rangers to have exceptional access for wheelchairs, not mention abundant moose and many sites in the hunting area that provided the hunters with a variety of hunting sites in a true Alaskan setting.

Preparations and planning for the hunt began on many fronts throughout the



**Ernie Butler (left) and volunteer assistant Bev Fronterhouse, president of Hunters Who Care, keep watch for moose at Chena Lake. (Photo courtesy of Alaska District)**

summer. As the host agency, the Corps was responsible for identifying an accessible hunting area, providing access to the area, assisting the hunters, and promoting positive public relations in the local community, including other hunters using the Chena Project.

The PVA was responsible for the hunters' transportation, meals, and lodging, field logistics, sponsor coordination, national media coverage, and local volunteer support.

### Hunters and volunteers

Finding three experienced "volunteer" wheelchair hunters who wanted to come to Alaska was easy. PVA president, Joseph Fox Sr., from Washington D.C.; Toby Clement from Arizona; and Ernie Butler from Washington State were chosen.

Volunteers and community support were vital to the success of the Chena moose hunt. Bev Fronterhouse, a past president of the Fairbanks chapter of the Safari Club and president of Hunters Who Care, was especially helpful.

She recruited volunteers to accompany and assist the hunters in the field each day, scheduled extracurricular activities for the hunters in Fairbanks, brought hot gourmet lunches and field snacks for the hunters and volunteers each day, and developed and distributed special hunt flyers to encourage community support for the hunt.

Fronterhouse also planned and arranged a wild game dinner and awards ceremony at Two Rivers Lodge restaurant following the hunt.

The Fairbanks North Star Borough provided a wheelchair-accessible van for transporting the hunters to and from

Fairbanks each day. North Pole Coffee Roasting Company provided fresh coffee and muffins each morning, and B-Y Farms donated free moose cutting and wrapping services.

The Chena Project also lured Vicky Silcox, a park manager in Seattle District, to assist Chena rangers with the hunt. In her experience with the Corps she has worked extensively with hunters, has excellent visitor assistance skills, and is a successful big game hunter in Montana.

Before the season opened, the hunt began with a kickoff barbecue for the hunters, volunteers, and sponsors on top of the dam. The barbecue featured Chena moose burgers and Valdez halibut.

### Bad weather

The hunters set about their adventure on opening day under the worst weather conditions possible for moose hunting. Unseasonable rainfall drenched the project for five straight days, necessitating that Moose Creek Dam be operated to store water behind the dam.

Never before had the dam been operated so late in the year, nor had so few bull moose been sighted during the early part of the season. (The hunters were restricted to shooting only bulls.)

Excitement built, however, on the first day when one hunter spotted a young bull behind him and was able to wheel around and take a quick shot. His bullet missed, but the opportunity excited everyone.

### Tough hunters

Undaunted by conditions, the hunters and volunteers awoke each morning early enough to arrive at the Chena Project at 4 a.m. to be transported to their hunting sites by 5 a.m.

The paralyzed hunters often sat in the cold rain for more than 12 hours

**Continued on next page**

**HR** Corner

## More potential changes on the horizon

USACE 2012 is "The Big Story" in the U.S. Army Corps of Engineers at the moment, but there are other potential changes on the horizon that we all need to learn more about. One of those changes is the National Security Personnel System (NSPS).

NSPS was approved and authorized under the National Defense Authorization Act for fiscal year 2004, and signed by the President on Nov. 24. The authorization provides broad legislative authority to the Department of Defense to establish a new civilian personnel management system for its civilian work force. The new personnel system will replace the Title 5 Civil Service regulations we have been using.

NSPS enables civilians to contribute as a more integrated part of the total force. Secretary of Defense Donald Rumsfeld has spoken of the NSPS as the "most significant improvement to civilian personnel management since the Civil Service Reform Act of 25 years ago."

Designed to provide senior managers greater flexibility in managing civilians, competing for high quality talent, offering compensation competitive with the private sector, and rewarding outstanding service, NSPS also opens the door for defense transformation. It transforms the personnel system for civilian defense workers so that the right person can be put in the right job to meet the challenges of today's post Cold War world.

NSPS will change how civilians are hired, assigned, rewarded, advanced, and removed, as well as how appeals are handled — all within the context of merit system principles, accommodation of veterans' preference, and respect for bargaining rights. Under this system, managers will have the flexibility to place civilian workers where they are most needed without needless delay. New employees can be hired more quickly, the promotion process will be streamlined, and pay for performance bonuses will be available.

NSPS also preserves the principles of equal opportunity, diversity, systematic development, ethical behavior, due process, protection against non-merit based actions, and preserves the rights of whistleblowers.

NSPS will not change many of the benefits we now enjoy, such as leave and attendance, travel and subsistence allowances, training, health insurance and retirement benefits, and safety and drug abuse programs.

Provisions of NSPS include other flexibilities such as permanent voluntary separation incentive pay, voluntary early retirement authority, and elimination of pay offset for reemployed annuitants.

This new personnel system will be established in collaboration with employee representatives, and in coordination with the U.S. Office of Personnel Management. It will be phased in during a period of at least two years.

You can learn more about NSPS and its provisions at [www.cpms.osd.mil/nsps/index.html](http://www.cpms.osd.mil/nsps/index.html).



# Around the Corps

## Recycling debris

A Louisville District contractor recycled tons of construction byproducts while demolishing parking lots and Building 20125 at Wright-Patterson Air Force Base, Ohio.

Sentinel Contractors, a small Native-American firm, looked for ways to minimize materials disposed in landfills. "Sentinel's on-site superintendent expressed a commitment to comply with this preference without increasing costs to the government, and has been successful beyond expectations," said Gary Stevens, the Corps' construction project engineer.

Items diverted from the landfill include 40 tons of ceiling tiles sent back to the manufacturer, 300 solid wood doors and 50,000 cubic feet of insulation given to the local Habitat for Humanity, 4,000 pounds of chalkboards given to Montgomery County schools, and 4,000 light bulbs given to the base.

## Hispanic partnership

The Corps entered a partnership with the Hispanic Engineer National Achievement Awards Corporation (HENAAC) on Jan. 16 at California State University in Los Angeles. Lt. Gen. Robert Flowers, Chief of Engineers, signed a memorandum of understanding to support the program.

HENAAC is a national organization that tells the Hispanic community and the nation about the achievements of Hispanics to science, engineering, and technology. Partnership goals include:

- Preparing Hispanic engineering students for responsible positions in engineering and science.
- Telling Hispanic engineering students about the Corps' missions and opportunities.
- Helping colleges and universities provide science and engineering education to Hispanic students.
- Producing a world-class pool of talent throughout the Army.

A joint statement said, "We recognize that a workforce of diverse, high-performing individuals with valuable talents and strengths is critical to providing excellent services to all our customers, especially Soldiers and their families."

## Leadership development

Twenty-three people recently graduated from the second Leadership Development Program (LDP) class of South Atlantic Division. Participants included engineers, biologists, economists, budget analysts, physical sci-

tists, geologists, park rangers, and more. For the first time, an EPA representative also attended.

The year began with a look at leadership and self-awareness, led by Ken Burns of the Center for Army Leadership School. They learned more about themselves and their leadership capabilities, and formed close bonds.

Next, the class joined South Pacific Division's LDP for a trip to Washington, D.C. The Government Affairs Institute provided an "Inside the Beltway" perspective of how government works, and many participants met personally with their Congressman. The group met with a Transportation Subcommittee member regarding the Water Resources Development Act, and Lt. Gen. Robert Flowers, Chief of Engineers, and Maj. Gen. Robert Griffin, Deputy Commander, shared insights about the Corps' future challenges.

Later, the LDP group took a tour of Civil War battle-grounds in Vicksburg, Miss., analyzing leadership strategies of Confederate and Union armies, and visited Engineering Research & Development Center labs and Mississippi Valley Division headquarters.

The group toured the Apalachicola-Chattahoochee-Flint river basin to see the lock and dam system, toured Fort Bragg, N.C., to learn more about military construction, and toured SAD headquarters to meet their division contacts.

For their group project, they tackled increasing understanding of the Corps' Environmental Operating Principles. They developed a business card simplifying the seven principles into the acronym "BALANCE." They also developed a video, posters, case studies, and a framework for the required Environmental Management System the Corps must implement.

## Gateway to technical data

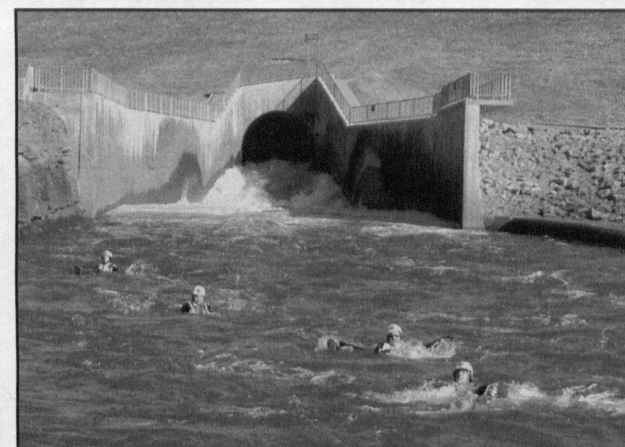
In 1985, the Defense Logistics Information Service was directed to establish a central index/locator system called the Military Engineering Data Asset Locator System (MEDALS).

Implemented in 1988, MEDALS is DoD's only central locator system for engineering drawings. DoD technical data repositories that store and distribute engineering drawings supplies MEDALS with index data and associated information. MEDALS in turn supplies this information to its customers along with the drawing location.

MEDALS is an interactive on-line system that indicates quickly and easily where engineering drawings or documents reside, and gives the user information and the ability to order them. It also contains information about

which repositories hold specific engineering documents. MEDALS currently provides the location of more than 36.4 million engineering data assets at 31 different data repositories.

There is no charge to use MEDALS. The homepage can be viewed at [www.dlis.dla.mil/medals](http://www.dlis.dla.mil/medals). For more information about MEDALS, contact Warren Scott (program manager) at [warren.scott@dla.mil](mailto:warren.scott@dla.mil) (269) 961-5509.



Members of Campbellsville-Taylor County Rescue take swift water recovery training in the tailwater of Green River Lake.

## Training saves child

The Campbellsville-Taylor County Rescue (CTCR) presented the first Chief's Shield of Service award to Green River Lake in Louisville District for the Corps' contribution to swift water recovery training, which resulted in the rescue team saving a 12-year-old girl.

The award recognized the partnership between the Corps and the CTCR. Green River Lake made gate changes for two days, enabling the team to conduct swift water recovery training under controlled conditions in the lake's tailwater.

Shortly after the training, Marion County requested the rescue team's assistance in rescuing a flash-flood victim.

"They saved a 12-year-old girl clinging to a tree limb after she had been swept about two miles downstream when her family's mobile home was knocked from its foundation," said George Williams, a Green River Lake park ranger. "CTCR said this type of rescue wouldn't have been possible without the training in swift water recovery they received through our cooperation."

## Moose hunt

### Continued from previous page

a day. Their spirit and love of hunting kept them in the field under conditions that would have driven lesser hunters back to a warm bed. The hunters never said a discouraging word, nor showed any evidence of dampened spirits.

### No bull

Frequent cow moose sightings each day kept the hunters excited. They maintained their sense of humor, kidding each other about being in bear country and calling themselves "meals on wheels."

The five-day hunt ended on a beautiful, sunny September day with waterfowl enjoying the lake behind the dam. The hunters sighted 19 moose that day, all cows and calves.

The hunt was considered a success despite the Chena Project bulls being uncooperative. The hunters agreed it was the best hunt they had ever experienced in terms of anticipation, excitement, wildlife sightings, and satisfaction with the hunting area and the people who made it possible. They were appreciative of the Alaska District and Chena Project for providing them with the op-

portunity to experience an Alaskan moose hunt.

The 2003 PVA moose hunt created a wave of excitement throughout the PVA community of hunters. The hunt proved that with proper planning, support, and logistics, mobility-impaired persons can enjoy a quality hunting experience in Alaska. It showcased the Corps, Alaska District, and Chena Project nationally.

### Plans for 2004

Based on the success and publicity of the 2003 hunt, the PVA is excited about having another moose hunt for three more members this year. They consider the Chena Project very accessible and the level of support they received in Fairbanks unmatched.

Planning for next year's hunt is already underway. A number of celebrity volunteers have confirmed their attendance, including Gen. Joe Engle (space shuttle commander); Gen. (USMC ret.) Craig Boddington (outdoor writer); Aaron Tippin (country singer and PVA national spokesperson); and Gen. Douglas Pearson (commander of Edwards Air Force Base).

## Engineer Update Online

These are some of the articles featured in March edition of Engineer Update Online. You can access it at [www.hq.usace.army.mil/cepa/pubs/update.htm](http://www.hq.usace.army.mil/cepa/pubs/update.htm)

**ATV trail** -- Kansas City District upgrades the all-terrain vehicle trail at Perry Lake to provide better service. It is the only public access ATV facility in their area.

**Barging in** -- An old powered barge is a real workhorse at Dale Hollow Lake in Nashville District.

**Robots** -- Competition turns tinkers loose to build a better robot.

**Secret journey** -- The Army took a massive generator on a secret trip across hostile territory in Iraq. It now provides electric power to the Iraqi power grid.

**Goats** -- A herd of goats, the original four-legged mowing machine, keeps weeds down at Corps project in Portland District.



# Family makes second trip to Super Bowl

By Elizabeth Slagel  
Huntington District

While most people enjoyed one of the best-played Super Bowls from their living rooms, Huntington District's Kim Court Brown caught it all from the 40 yard line in the Houston Astrodome. She was sitting just behind her husband, New England Patriots wide receiver Troy Brown, as the Patriots beat the Carolina Panthers in a 32-29 thriller that went down to the last seconds.

Although it was the second Super Bowl victory for the 11-year NFL veteran, the excitement was still there. Troy began the game with a bang in a 28-yard punt return in the first quarter that ended with a bloody nose.

"What I saw was the tackle and Troy get up and hold his face," said Kim, a regulatory project manager. "Troy says he caught the ball and the guy came in and rammed him with his knee after the tackle."

Troy was taken to the sidelines and all Kim saw was blood. "It was nerve-racking because I didn't know what was going on or if he'd get to finish playing the game."

He did finish, racking up eight catches, 76 yards rushing, and four good punt returns.

Analysts agree the fourth quarter was one of the most exciting in Super Bowl history. Both teams combined for 37 points, the most for any quarter in any Super Bowl.

The Patriots were ahead.

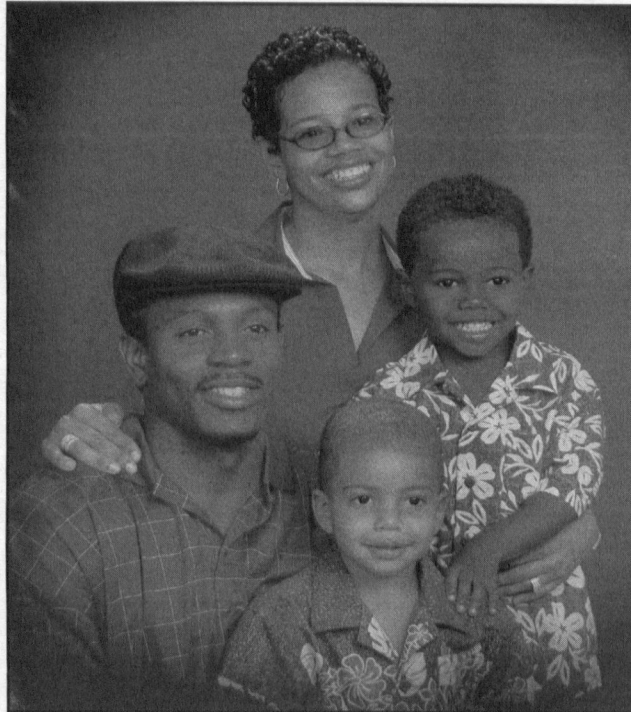
Then the Panthers were ahead.

Then the Patriots were ahead again.

Then the Panthers tied the game.

Troy did not score the winning touchdown, but he played a critical role in the fourth quarter. A pass from quarterback Tom Brady to Troy was good for first down at the Panthers 47 yard line with 51 seconds left in the game. An offensive pass interference call on Troy negated a 20-yard completion and knocked New England back 10 yards to their own 43.

But Brady came back to Troy for 13 yards, then to Daniel Graham for four yards, and finally to Deion Branch for 17 yards, putting the Patriots on the Panthers' 23 yard line with nine seconds left. Place-kicker Adam Vinatieri nailed



Kim Brown with husband Troy and sons Sirmon, 5, and Saanjay, 3. (Photo courtesy of Kim Brown)

a 41-yard field goal to win the game.

"There is no better feeling in the world," Troy is quoted on the Patriot's Website. "This one is even better than the first. Ten times better than the first."

Although Kim describes Troy as quiet and reserved, that all evaporated with the victory. He raced into the stands and grabbed their sons Sirmon, 5, and Saanjay, 3, and took them onto the field. Kim celebrated with family and fans in the stands.

"It was all about the kids this year," said Kim. "That's all he talked about - 'I want the boys to experience this.' He's a great dad. Those boys are really lucky to have him, and so am I."

She says Troy was able to enjoy this Super Bowl more



Troy Brown outruns a Panther tackler during the Super Bowl. (Photo courtesy of the New England Patriots)

than the first, mostly because his boys were there. And there was less pressure. During the first Super Bowl he was more in the spotlight, while quarterback Tom Brady was this year's Patriot star.

The Brown family and Patriot team celebrated all night. After the presentation of the Vince Lombardi Trophy, the Patriots held a victory party in the hotel. Kim says she got back to her room in just enough time to gather up their things and head for the airport at 11 a.m. the next day.

As for the infamous Super Bowl half-time show starring Janet Jackson and Justin Timberlake, Kim says she didn't even realize what had happened until later.

"There was so much going on, all I saw was Janet holding herself. I thought she was hurt. My kids are afraid of fireworks, so they covered their eyes. It's unfortunate, because that was one of the best Super Bowls ever, but all the news media talked about was the Janet incident."

While the exposure stunt may have overshadowed media coverage of the game, it won't overshadow the memories the Brown family will share of their second Super Bowl victory.

## Bahrain

Continued from page one

"This is a highly technical facility built in two phases during a three-and-a-half year period," said Jack Ham, TAC program manager. "The facility is actually two separate projects for two Navy organizations under one roof — the headquarters for NAVCENT operations, and the operational control facility for Naval Telecommunications and Computer Services."

The building was designed as two separate but connected facilities. The project was awarded with the headquarters to be built first, with an option for building the telecommunications and computer facility.

**Impressive.** The Navy's program manager, Capt. Charles Chandonnet, describes the facility as a "sophisticated, upscale, state-of-the-art building." Chandonnet has been the liaison officer for the Corps' efforts in Bahrain since early 1998.

"In fact, 'impressive' is the word I most often hear when describing the design and workmanship of the building," Chandonnet said. "This is truly an outstanding facility that the Corps and the Navy can be proud of."

The three-story, reinforced concrete building is about 11,905 square meters (128,000 square feet), with administrative space, offices, computer and communications equipment rooms, and conference areas. It will house 500 people. The facility also has back-up generators, an uninterrupted power system, and an intrusion detection system. It has more than 100 miles of telecommunications cable.

"A design challenge was to satisfy the tenants preferred placement in the building, in conjunction with their operational considerations, in a large building built on an irregular-shaped site," said Crawford Horne, TAC architect. "The resulting solution featured unequal floor areas for each

level, with corresponding 'step-backs' to the building façade. This helped to soften the building profile since windows are limited because of force protection.

**Traditional elements.** "In addition, the Navy Public Works Office asked that the façade express design elements that are consistent with some of the more traditional local architecture in Bahrain," Horne added.

The traditional architectural elements include a notched profile rhythmically spaced along the length of the building parapet, and windows that are simple in form and repetitive in placement. The design also blends in with other recent construction at the Naval Support Activity.

"As when building a high-tech facility, the team had to adjust for changes in technology," Ham said. "We had a change in the network architecture, requiring the communications local area network (LAN) cabling to be installed by a specialist instead of the construction contractor."

Accordingly, TAC awarded a \$3.1 million contract to International Information Systems of Bahrain to install the cable, while the primary construction contractor, Contrack International Inc., of Arlington, Va., continued with its \$18.8 million contract.

**'No problem' attitude.** Changes in communications and LAN technology required additional work as well, and a mission change required reconfiguration of a significant portion of the space.

"These changes could have added months to the schedule, but the team — the Navy program manager, the resident office staff, and the construction contractor — developed a plan for joint occupancy," Ham said. "This allowed several specialty contractors to work in the facility before final completion. Because of this cooperation, the customers occupied the building essentially on schedule."

Many of the changes required during construction were the result of shifting operational requirements, Chandonnet said. "The absolute 'no problem' attitude by the local Corps office and the contractor is the only reason the Navy has exactly what we need for our mission requirements."

**Coordination.** Muhammad Khan, project engineer in TAC's Bahrain resident office, said that a significant amount of interface occurred between the construction contractor and fiber optics contractor.

"The coordination between the contractors and the Navy organizations was the most challenging aspect," he said. "As construction neared completion, numerous Navy organizations were involved with the sophisticated technology systems. In addition, we had specialty contractors, such as the intrusion detection system contractor and the systems furniture contractor, whose efforts had to be coordinated and completed before the scheduled opening."

"I feel all the parties worked well together," Khan said. "I would especially thank Capt. Chandonnet and Ayman El Gayar of Contrack International."

During the ribbon-cutting ceremony, Nichols presented Khan with the U.S. Navy Superior Civilian Service Award "in recognition of superior service which has been of exceptional value and great benefit to the Navy."

**Service support center.** TAC broke ground last November for another important project at the Naval Support Activity. The Installation Service Support Center, awarded for \$25 million, will consolidate activities in more than 20 buildings into one. It will include dining and food services, shopping, banking, fitness and recreation, and morale, welfare, and recreation administrative offices.

TAC is also working with the Navy on other projects that are in the planning stages.